

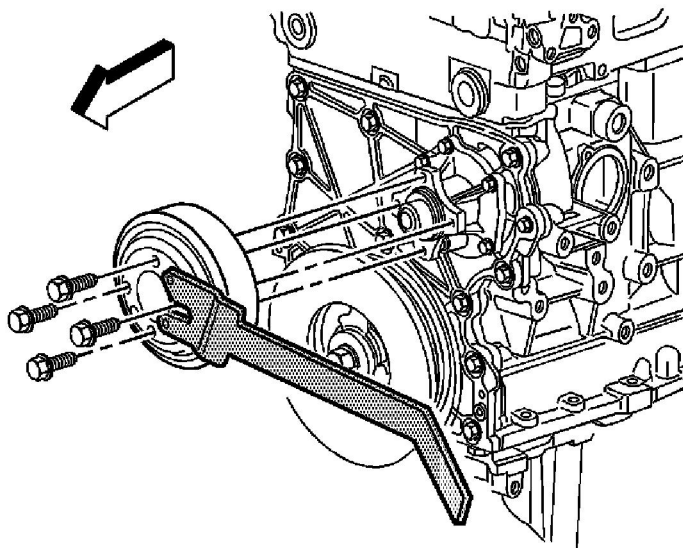
Water Pump: Service and Repair

Water Pump Replacement (LLV,/LLR) (2.9L/3.7L)

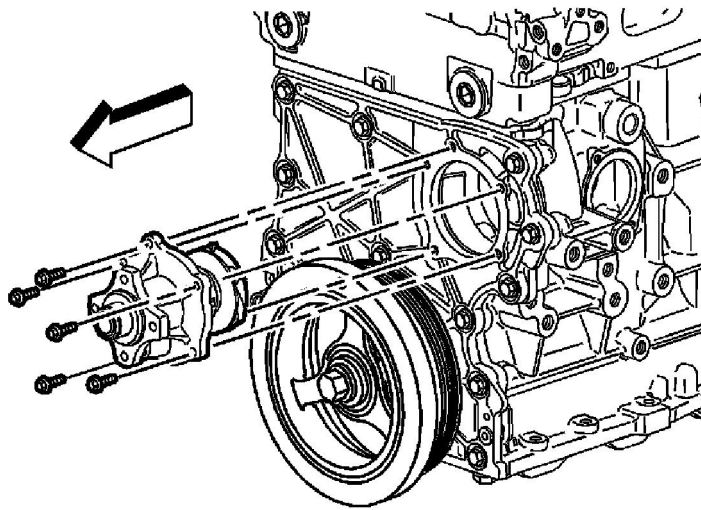
Special Tools

J 46406 Fan Clutch Remover and Installer

Removal Procedure



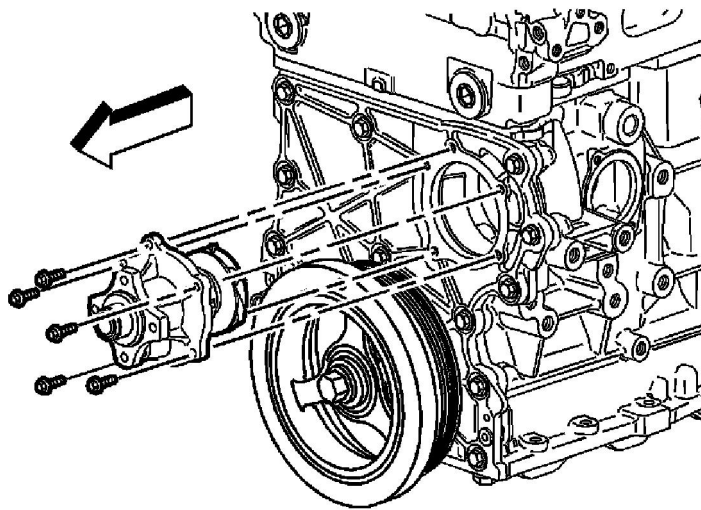
1. Drain the cooling system. Refer to Cooling System Draining and Filling (Static Fill) (See: Cooling System/Service and Repair/Cooling System Draining and Filling (Static Fill)) Cooling System Draining and Filling (Vac N Fill) (See: Cooling System/Service and Repair/Cooling System Draining and Filling (Vac N Fill)).
2. Remove the fan. Refer to Fan Replacement (LH8) (See: Cooling System/Radiator Cooling Fan/Service and Repair) Fan Replacement (LH9) (See: Cooling System/Radiator Cooling Fan/Service and Repair).
3. Remove the drive belt. Refer to Drive Belt Replacement (See: Drive Belts, Mounts, Brackets and Accessories/Drive Belt/Service and Repair) or Drive Belt Replacement (See: Drive Belts, Mounts, Brackets and Accessories/Drive Belt/Service and Repair).
4. Using the J 46406, secure the water pump pulley and remove the water pump pulley bolts.
5. Remove the J 46406.
6. Remove the water pump pulley.



7. Remove the water pump bolts.
8. Remove the water pump.
9. Discard the gasket.

Installation Procedure

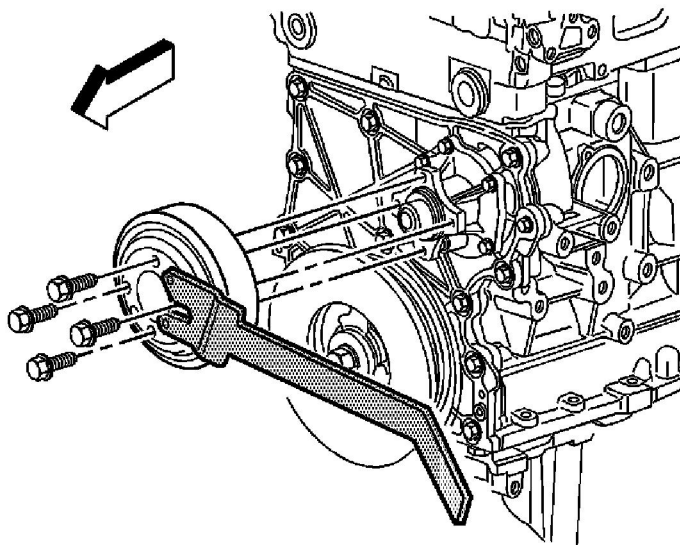
1. Install a new water pump gasket.



2. Position the water pump to the engine.

Caution: Refer to Fastener Caution (See: Service Precautions/Vehicle Damage Warnings/Fastener Caution).

3. Install the water pump bolts and tighten to **10 Nm (89 lb in)**.



4. Install the water pump pulley.
5. Install the water pump pulley bolts.
6. Using the J 46406, secure the water pump pulley while tightening the water pump pulley bolts. Tighten the bolts to **25 Nm (18 lb ft)**.
7. Remove the J 41240.
8. Install the drive belt. Refer to Drive Belt Replacement (See: Drive Belts, Mounts, Brackets and Accessories/Drive Belt/Service and Repair) or Drive Belt Replacement (See: Drive Belts, Mounts, Brackets and Accessories/Drive Belt/Service and Repair).
9. Install the fan. Refer to Fan Replacement (LH8) (See: Cooling System/Radiator Cooling Fan/Service and Repair) Fan Replacement (LH9) (See: Cooling System/Radiator Cooling Fan/Service and Repair).
10. Fill the cooling system with the specified coolant and concentration. Refer to Cooling System Draining and Filling (Static Fill) (See: Cooling System/Service and Repair/Cooling System Draining and Filling (Static Fill)) Cooling System Draining and Filling (Vac N Fill) (See: Cooling System/Service and Repair/Cooling System Draining and Filling (Vac N Fill)).
11. Inspect for leaks.